PR 3 0	2004 On ter the Paperwork Reduction Act of 1995, r		U.S. Patent and Trademar	ed for use through 10/31/2002. OMB 0651-0031 tk Office: U.S. DEPARTMENT OF COMMERCE mation unless it displays a valid OMB control number. 10/712,975	:
& TRADE	TRANSMITTAL	_	Filing Date	November 13, 2003	
	FORM		First Named Inventor	Ivan Osorio	
	(to be used for all correspondence after	initial filing)			_
•	(to be used for all correspondence after the	muai illing)	Group Art Unit	3762	
A.		<u> </u>	Examiner Name	Not assigned	
***	Total Number of Pages in This Submissio	n	Attorney Docket Number	011738.00144	_
		ENCL	OSURES (check all that apply)		_
	Fee Transmittal Form		ment Papers Application)	After Allowance Communication to Group	
	Fee Attached	☐ Drawin	g(s)	Appeal Communication to Board of Appeals and Interferences	
	Preliminary Amendment	Form F referer	PTO/SB/08A and B (without nces)	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)	
	☐ After Final	Petition	n	Proprietary Information	
	Affidavits/declaration(s)		n to Convert to a ional Application	Status Letter	
	Extension of Time Request		of Attorney, Revocation e of Correspondence Address	Other Enclosure(s) (please identify below):	
	Express Abandonment Request		al Disclaimer st for Refund	Express Mail Certificate (1 page Return Receipt Postcard)
	☐ Information Disclosure Statement		umber of CD(s)		
	Certified Copy of Priority Document(s)	Rema	rks		
	Response to Missing Parts/	The Comn	nissioner is hereby authorized	to charge any deficiencies in payment or	

Incomplete Application

Response to Missing
Parts under 37 CFR
1.52 or 1.53

Binal J. Patel

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PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

(Attorney Docket No. 11738.00144)

In the Ap	oplication of:	
	Ivan Osorio, et al.	
Serial No	o. 10/712,975	Group Art Unit: 3762
Filed:	November 13, 2003	Examiner: Not assigned
	VAGAL NERVE STIMULATION TECHNIQUES) FOR TREATMENT OF EPILEPTIC SEIZURES)	

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. 1.97 and 1.98, the Applicant wishes to make the following references of record in the above-identified application. This Information Disclosure Statement is in compliance with the continuing duty of candor as set forth in 37 C.F.R. 1.56. Copies of the references cited below can be found in U.S. Patent No. 6,341,236, issued January 22, 2002 (Serial No. 09/302,516). The references are also listed on the enclosed and completed PTO Form 1449.

REFERENCES

U.S. Patent Documents

- 1. U.S. Patent No. 4,628,942, issued December 16, 1986;
- 2. U.S. Patent No. 4,649,936, issued March 17, 1987;
- 3. U.S. Patent No. 4,702,254, issued October 27, 1987;
- 4. U.S. Patent No. 4,867,164, issued September 19, 1989;
- 5. U.S. Patent No. 5,025,807, issued June 25, 1991;
- 6. U.S. Patent No. 5,052,388, issued October 1, 1991;
- 7. U.S. Patent No. 5,330,508, issued July 19, 1994;
- 8. U.S. Patent No. 5,562,711, issued October 8, 1996;
- 9. U.S. Patent No. 5,713,923, issued February 3, 1998;
- 10. U.S. Patent No. 5,928,272, issued July 27, 1999; and
- 11. U.S. Patent No. 5,995,868, issued November 30, 1999.

Other Prior Art

- 1. Handforth et al., "Vagus Nerve Stimulation Therapy for Partial Onset Seizures: A Randomized Active Control Trial," J. Neurology, vol. 5, pp. 48-55 (1998);
- 2. Han et al., "Probably Mechanisms of Action of Vagus Nerve Stimulation in Humans with Epilepsy: Is the Heart the Window into the Brain?" AES Processing, p.83 (1997);

- 3. Frei et al., "Effect of Vagal Stimulation on Human ECG," Abstract from the Annual Meeting of the American Epilepsy Society, vol. 39, Supp. 6 (1998);
- 4. Salinskey et al., "Vagus Nerve Stimulation Has No Effect on Awake EEG Rhythms in Humans," J. Epilespia, vol. 34(2), pp. 229-304 (1993);
- 5. Michael H. Chase et al., "Afferent Vagal Stimulation neurographic Correlates if Induced EEG Synchronization and Desynchronization," Brain Research pp. 236-249 (1967);
- 6. Chase et al., "Cortical and Subcortical Patterns of Response to Afferent Vagal Stimulation," Experimental Neurology, vol. 16, pp. 36-49 (1966);
- 7. Jalife J. Anzelecitch C., "Phase Resetting and Annihilation of Pacemaker Activity in Cardiac Tissue," Science 206:695-697 (1979);
- 8. Windfree AT., "Sudden Cardian Death: A Problem in Topology," Sci Am, 248:144-161 (1983):
- 9. Ruda, Anti, "A Real-Time Microprocessor QRS Detector System with a 1-ms Timing Accuracy for the Measurement of Ambulatory HRV," IEEE Transactions on Biomedical Engineering, vol. 44, Nos. 3, pp. 159-167 (Mar. 1997);
- 10. Accornero et al., "Selective Activation of Peripheral Nerve Fibre Groups of Different Diameter by Triangular Shaped Pulses," J. Physiol., pp. 539-560 (1977);
- 11. Bures et al., "Electrophysiological Methods n Biological Research" Academic Press New York, London pp. 338-339 (3rd ed. 1967);
- 12. Jones et al., "Heart Rate Responses to Selective Stimulation of Cardiac Vagal C Fibers in Anaesthetized Cats, Rats and Rabbits," J. Physiol (London) 489.1:203-214 (1995);
- 13. Jalife J. Antzelevitch C., "Pacemaker Annihilation: Diagnostic and Therapeutic Implications," Am Heart J 100:128-130 (1980);
- 14. Frei et al., "Effects of Vagal Stimulation on Human EEG," AES Proceedings, p. 200 (1998);
- 15. Asconape et al., "Early Experience with Vagus Nerve Stimulation for the Treatment of Epilepsy; Cardiac Complications," AES Proceeding, p. 193 (1998); and
- 16. Mark V. Kamath, "Neurocardiac Responses to Vagoafferent Electrostimulation in Humans," PACE, vol. 15, Oct. (1992) p. 1581.

Respectfully submitted,

BANNER & WITCOFF, LTD

Dated: April 30, 2004

Binal J. Patel Reg. No. 42,065

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 10/712,975

Filing Date November 13, 2003

First Named Inventor Ivan Osorio

Group Art Unit 3762

Examiner Name Not assigned

Attorney Docket Number 11738.00144

(use as many sheets as necessary)
Sheet 1 of 3

			U.S. PATENT	DOCUMENTS	
Examiner Initials *	Cite No. ¹		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-4,628,942	12/16/1986	Sweeney et al.	
		US- 4,649,936	03/17/1987	Ungar et al.	
		US- 4,702,254	10/27/1987	Zabara	
		US- 4,867,164	09/19/1989	Zabara	
		US- 5,025,807	06/25/1991	Zabara	
· · · ·		US- 5,052,388	10/01/1991	Sivula et al.	
		US- 5,330,508	07/19/1994	Gunderson	
		US- 5,562,711	10/08/1996	Yerich et al.	
		US- 5,713,923	02/03/1998	Ward et al.	
		US- 5,928,272	07/27/1999	Adkins et al.	
		US- 5,995,868	11/30/1999	Dorfmeister et al.	
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	FOREIGN PATENT DOCUMENTS							
Examiner Cite		Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant			
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶		
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Examiner Signature	Date Considered	

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¹ Applicant's unique citation designation number (optional) . ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.
³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Substitu	Substitute for form 1449A/PTO			Complete if Known		
1815				Application Number	10/712,975	
INFORMATION DISCLOSURE				Filing Date	November 13, 2003	
STA	STATEMENT BY APPLICANT			First Named Inventor	Ivan Osorio	
				Group Art Unit	3762	
	(use as many	sheets as	necessary)	Examiner Name	Not assigned	
Sheet	2	of	3	Attorney Docket Number	11738.00144	

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS			
Examiner City No		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issu number(s), publisher, city and/or country where published.			
		Handforth et al., "Vagus Nerve Stimulation Therapy for Partial Onset Seizures: A Randomized Active Control Trial," J. Neurology, vol. 5, pp. 48-55 (1998)			
		Han et al., "Probably Mechanisms of Action of Vagus Nerve Stimulation in Humans with Epilepsy: Is the Heart the Window into the Brain?" AES Processing, p.83 (1997)			
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		Windfree AT., "Sudden Cardian Death: A Problem in Topology," Sci Am, 248:144-161 (1983)			
		Ruda, Anti, "A Real-Time Microprocessor QRS Detector System with a 1-ms Timing Accuracy for the Measurement of Ambulatory HRV," IEEE Transactions on Biomedical Engineering, vol. 44, Nos. 3, pp. 159-167 (Mar. 1997)			
		Accornero et al., "Selective Activation of Peripheral Nerve Fibre Groups of Different Diameter by Triangular Shaped Pulses," J. Physiol., pp. 539-560 (1977)			
		Bures et al., "Electrophysiological Methods n Biological Research" Academic Press New York, London pp. 338-339 (3rd ed. 1967)			

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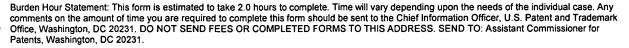
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· INIE		N DIO		Application Number	10/712,975	
		–	CLOSURE	Filing Date	November 13, 2003	
STATEMENT BY APPLICANT				First Named Inventor	Ivan Osorio	
				Group Art Unit	3762	
	(use as many	sheets as	necessary)	Examiner Name	Not assigned	
Sheet	3	of	3	Attorney Docket Number	11738.00144	

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
		Jones et al., "Heart Rate Responses to Selective Stimulation of Cardiac Vagal C Fibers in Anaesthetized Cats, Rats and Rabbits," J. Physiol (London) 489.1:203-214 (1995)				
		Jalife J. Antzelevitch C., "Pacemaker Annihilation: Diagnostic and Therapeutic Implications," Am Heart J 100:128-130 (1980)				
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By:

Application of:

Ivan Osorio, et al.

Application No.:

10/712,975

Filing Date:

November 13, 2003

Title:

Vagal Nerve Stimulation Techniques For Treatment Of Epileptic Seizures

Transmitted herewith are the following documents:

 \underline{X} Transmittal Form (1 page) in duplicate

X Information Disclosure Statement (2 pages)

X Form PTO/SB/08A and B (3 pages) without references

X Return Postcard

Attorney Case No.:

011738.00144